

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554**

In the Matter of)	
)	
LightSquared Subsidiary LLC)	
)	RM-11681
Petition for Rulemaking to Allocate the)	
1675-1680 MHz Band for Terrestrial)	
Mobile Use)	

COMMENTS OF T-MOBILE USA, INC.

T-Mobile USA, Inc. (“T-Mobile”), pursuant to Section 1.405 of the Commission’s rules and the Public Notice issued by the Commission on November 9, 2012, submits these comments in response to the Petition for Rulemaking (“Petition”) filed by LightSquared Subsidiary LLC (“LightSquared”).^{1/} The Petition requests that the Commission amend the U.S. Table of Allocations to add a primary allocation permitting non-Federal terrestrial mobile use of the 1675-1680 MHz band. T-Mobile generally supports making additional spectrum available for mobile broadband services. However, it urges the Commission to take no action in response to the Petition that would jeopardize the potential use of 1695-1710 MHz, also within the 1675-1710 MHz band, that may be designated for auction pursuant to the Middle Class Tax Relief and Job Creation Act of 2012.^{2/}

I. INTRODUCTION AND BACKGROUND

T-Mobile, a wholly-owned subsidiary of Deutsche Telekom AG (“DT”), is headquartered in Bellevue, Washington, and offers nationwide wireless voice and data services to individual

^{1/} See Petition for Rulemaking, filed by LightSquared Subsidiary LLC., RM-11681 (filed Nov. 2, 2012) (“Petition”); *Consumer & Governmental Affairs Bureau Reference Information Center Petition for Rulemaking Filed*, Public Notice, Report No. 2967 (rel. Nov. 9, 2012).

^{2/} See 47 U.S.C. §§ 1451(a)-(b) (“*Spectrum Act*”).

and business customers. It is the fourth largest wireless carrier in the United States and serves approximately 33 million subscribers.

The Petition is part of LightSquared's plan to offer terrestrial mobile services. It seeks use of the 1675-1680 MHz band in partial exchange for spectrum in the 1545-1555 MHz band for which it is currently licensed. LightSquared is now unable to use the latter band for mobile wireless operations because it has not satisfied the conditions the Commission specified in its Order granting authority for LightSquared to use the spectrum for terrestrial operations.^{3/}

T-Mobile agrees with LightSquared that additional spectrum should be made available for mobile wireless operators to meet rapidly expanding consumer demands. According to CTIA, wireless data traffic increased 104 percent from July 2011 to June 2012,^{4/} illustrating "Americans' growing appetite for more mobile data and the wireless industry's need for more spectrum to meet their demands."^{5/} A similar report issued by Cisco predicts that global mobile data traffic will increase 18-fold between 2011 and 2016 at a compound annual growth rate of 78 percent,^{6/} and, as reported by the Council of Economic Advisors, "[i]t is unlikely that wireless carriers will be able to accommodate this surging demand without additional spectrum."^{7/}

^{3/} See *International Bureau Invites Comment on NTIA Letter Regarding LightSquared Conditional Waiver*, Public Notice, 27 FCC Rcd 1596 (2012); see also *LightSquared Subsidiary LLC., Request of its Authority for an Ancillary Terrestrial Component*, Order and Authorization, 26 FCC Rcd 566 (2011).

^{4/} See CTIA-The Wireless Association, *Semi-Annual Wireless Industry Survey* (Apr. 13, 2012), available at <http://www.ctia.org/advocacy/research/index.cfm/AID/10316>.

^{5/} CTIA Press Release, *Consumer Data Traffic Increased 104 Percent According to CTIA-The Wireless Association Semi-Annual Survey* (Oct. 11, 2012), available at <http://www.ctia.org/media/press/body.cfm/prid/2216>.

^{6/} See Cisco, *Cisco Visual Networking Index: Global Mobile Data Traffic Forecast Update, 2011-2016*, at 3 (Feb. 14, 2012), available at http://www.cisco.com/en/US/solutions/collateral/ns341/ns525/ns537/ns705/ns827/white_paper_c11-520862.pdf.

^{7/} Council of Economic Advisors, *The Economic Benefits of New Spectrum for Wireless Broadband*, at i (Feb. 2012), available at http://www.whitehouse.gov/sites/default/files/cea_spectrum_report_2-21-2012.pdf.

Indeed, T-Mobile initially supported LightSquared's proposed use of mobile satellite spectrum to meet this growing demand.^{8/} While the 1675-1680 MHz band may be helpful to meet those requirements for LightSquared or another licensee of the spectrum, any Commission action in response to the Petition should not jeopardize the reallocation of the most ideal segments of the larger 1675-1710 MHz band, *i.e.*, the 1695-1710 MHz band, under the Spectrum Act. Accordingly, T-Mobile is pleased to have the opportunity to submit the following Comments.

II. COMMENTS

The National Telecommunications and Information Administration ("NTIA") previously determined that the 1695-1710 MHz band can be made available for wireless broadband use and has recommended that the FCC take the necessary regulatory actions to do so.^{9/} NTIA's recommendation is based on shared use of the 1695-1710 MHz band between government and non-government users and work is ongoing, within an NTIA Commerce Spectrum Management Advisory Committee ("CSMAC") working group ("CSMAC Working Group"), to refine the conditions under which wireless broadband systems can share the 1695-1710 MHz band with legacy federal metrological earth station receivers.^{10/} T-Mobile is a co-chair of the CSMAC

^{8/} See Reply Comments of T-Mobile USA, Inc., IBFS File No. SAT-MOD-20101118-00239, at 1, 4, 7 (filed Dec. 9, 2010); *see also* Comments of T-Mobile USA, Inc., IB Docket No. 11-109, ET Docket No. 10-142, at 2, 4 (filed Feb. 27, 2012) (stating that it supported "efforts to alleviate the spectrum crunch by making spectrum in the [] MMS band available for terrestrial mobile broadband" and that it "supports the Commission's decision [in the LightSquared Waiver Order] to add a mobile and fixed allocation to the MMS bands to allow use of the spectrum for terrestrial broadband services.").

^{9/} NTIA recommended "that the FCC take the necessary regulatory actions to make available for wireless broadband 15 megahertz at 1695-1710 MHz...to be shared with currently allocated services." See Letter from Karl Nebbia, Associate Administrator, NTIA, to Julius Knapp, Chief, Office of Engineering and Technology, FCC, (Jan. 19, 2011), *available at* http://www.ntia.doc.gov/files/ntia/publications/ntia_fcc_letter_115_mhz_01192011.pdf.

^{10/} See, NTIA, *Framework for Work within CSMAC* (May 25, 2012), *available at* http://www.ntia.doc.gov/files/ntia/meetings/framework_for_work_within_csmac_20120525.pdf.

Working Group and has been active in this work because the 1695-1710 MHz band is immediately adjacent to existing Advanced Wireless Service (“AWS”) spectrum at 1710-1755 MHz, making it particularly desirable for commercial wireless systems. As recently as October 2012, the CSMAC Working Group made specific recommendations regarding the proposed use of the 1695-1710 MHz band.^{11/} The FCC’s consideration of the Petition should not, therefore, undermine these ongoing efforts to make the 1695-1710 MHz band available for broadband services.

CSMAC’s study of the use of the 1695-1710 MHz band is just the latest step in the evaluation of the band for commercial use. In an effort to implement the National Broadband Plan’s recommendation to make 500 megahertz of spectrum available for broadband use, and in cooperation with the National Telecommunications and Information Administration (“NTIA”), the Commission sought comment first on the potential use of the 1675-1710 MHz band in general and then the 1695-1710 MHz band in particular for mobile broadband services.^{12/} T-Mobile submitted comments in response to both the *2010 Public Notice* and the *2011 Public Notice*, in both cases endorsing the potential reallocation and noting the benefits of, the 1675-1710 MHz band, and in particular the 1695-1710 MHz segment, for commercial mobile broadband use.^{13/}

^{11/} See NTIA, CSMAC WG-1 Update and Liaison’s View, 1695-1710 MHz Meteorological-Satellite (Oct. 4, 2012), *available at* http://www.ntia.doc.gov/files/ntia/publications/csmac_wg1_report_for_csmac_oct_2012_observations_v5.pdf.

^{12/} See *Connecting America: The National Broadband Plan*, at xii, 10, 75 (March 2010); *Office of Engineering and Technology Requests Information on Use of 1675-1710 MHz Band*, Public Notice, 25 FCC Rcd 7285 (2010) (“*2010 Public Notice*”); *Spectrum Task Force Requests Information on Frequency Bands Identified by NTIA as Potential Broadband Spectrum*, Public Notice, 26 FCC Rcd 3486 (OET/WTB 2011) (“*2011 Public Notice*”).

^{13/} See Comments of T-Mobile USA, Inc., ET Docket No. 10-123 (filed June 28, 2010); Comments of T-Mobile USA, Inc., ET Docket No. 10-123, at 3, 7 (filed Apr. 22, 2012) (noting the 1695-1710 MHz

President Obama's June 2010 Memorandum echoed the National Broadband Plan and called for NTIA, in cooperation with the Commission, to make 500 megahertz of spectrum available for fixed and mobile wireless services.^{14/} In response, NTIA issued a report in October 2010 which noted that, among others, the 1675-1710 MHz band should be evaluated for non-Federal use.^{15/} At the same time, NTIA released its "fast track" evaluation ("Fast Track Evaluation"), discussing in greater detail several of the frequency bands identified in the *NTIA Ten-Year Plan* that were likely candidates for reallocation to non-Federal use.^{16/} NTIA's Fast Track Evaluation specifically identified the 1695-1710 MHz band as one of two spectrum bands for potential reallocation to non-Federal wireless broadband operations.^{17/} Finally, Congress

segment is one of the most promising options for mobile broadband services as it is below 3 GHz and has propagation characteristics that are ideal for mobile broadband technologies).

^{14/} Press Release, The White House, Office of the Press Secretary, *Presidential Memorandum: Unleashing the Broadband Revolution* (June 28, 2010), available at <http://www.whitehouse.gov/the-press-office/presidential-memorandum-unleashing-wireless-broadband-revolution>.

^{15/} See NTIA, *Plan and Timetable to Make Available 500 Megahertz of Spectrum for Wireless Broadband* (October 2010) ("*NTIA Ten-Year Plan*").

^{16/} See NTIA, *An Assessment of the Near-Term Viability of Accommodating Wireless Broadband Systems in the 1675-1710 MHz, 1755-1780 MHz, 3500-3650 MHz, and 4200-4220 MHz, 4380-4400 MHz Bands*, at 2-1, 2-2, 2-3 (October 2010) ("*NTIA 2010 Fast Track Evaluation*").

^{17/} *Id.* The *NTIA Ten-Year Plan* required interim progress reports. The First Interim Progress Report indicated that 1695-1710 MHz band spectrum should be identified as second in priority of the spectrum designated to be repurposed to exclusive or predominately non-Federal use. It reported that on January 19, 2011, in support of the Fast Track recommendations, NTIA formally recommended to the FCC that it take regulatory action to repurpose the 1695-1710 MHz band for wireless broadband use on a shared basis. The Second Interim Progress Report noted that, following NTIA's decision to repurpose 1695-1710 MHz, the FCC issued the *2011 Public Notice* seeking comment on the steps it could take to best promote wireless broadband deployment in band. The Third Interim Progress Report recognized the effort of CSMAC Working Group 1 to move away from exclusion zones and instead investigate alternative sharing approaches such as coordination zones, temporal sharing, and the feasibility of relocating satellite earth stations to protect federal operations from harmful interference from new wireless broadband operations. See NTIA, First Interim Progress Report on the Ten-Year Plan and Timetable, at 2-4 (April 2011), available at http://www.ntia.doc.gov/files/ntia/publications/first_interim_progress_report_04012011.pdf; NTIA, Second Interim Progress Report on the Ten-Year Plan and Timetable, at 8 (October 2011), available at http://www.ntia.doc.gov/files/ntia/publications/second_interim_progress_report_on_the_ten_year_plan_and_timetable.pdf; NTIA, Third Interim Progress Report on the Ten-Year Plan and Timetable, at 7 (November 2012), available at http://www.ntia.doc.gov/files/ntia/publications/third_interim_progress_report_final.pdf.

recognized the potential use of the 1675-1710 MHz band in the Spectrum Act. There, it directed the Secretary of Commerce to identify, by February 22, 2013, 15 megahertz of spectrum from the 1675-1710 MHz band that may be reallocated for commercial use.^{18/} The Spectrum Act requires that the 15 megahertz identified by the Secretary of Commerce be licensed by the Commission by February 22, 2015.

NTIA's Ten-Year Plan, its Fast Track Evaluation, CSMAC's focus, NTIA's letter to the FCC recommending that it take action to make 1695-1710 MHz available for wireless broadband, and the directive of the Spectrum Act all demonstrate that efforts are well underway to make the 1695-1710 MHz portion of the 1675-1710 MHz band available for mobile wireless applications. This Petition cannot, therefore, be viewed in a vacuum. There is nothing in the Spectrum Act that prevents NTIA from making available additional spectrum in the 1675-1710 MHz band if technically feasible given competing uses of the band, even though it is only required under the Spectrum Act to make 15 megahertz of that band available for auction. Accordingly, LightSquared's requested use of 1675-1680 MHz does not necessarily conflict with ongoing efforts to make the 1695-1710 MHz band available for wireless broadband. However, if NTIA considers 15 megahertz the limit on the spectrum in the 1675-1710 MHz band that it is required to reallocate under the Spectrum Act and the 1675-1680 MHz band is reallocated for LightSquared's use, then NTIA may not continue to focus on reallocating the 1695-1710 MHz band. T-Mobile therefore urges the FCC and NTIA not to undertake any action in the 1675-1680 MHz band that might inhibit the reallocation of the 1695-1710 MHz band for mobile broadband.

^{18/} See Spectrum Act §§ 1451(a)-(b).

III. CONCLUSION

T-Mobile agrees with LightSquared in that additional spectrum should be made available for mobile wireless operators to meet rapidly expanding consumer demands. Nevertheless, the Commission should not take any action that would jeopardize the potential use of the 1695-1710 MHz band that may be designated for auction pursuant to the Spectrum Act.

Respectfully submitted,

/s/ Kathleen O'Brien Ham

Howard J. Symons
Russell H. Fox
Megan Capasso*

Kathleen O'Brien Ham
Steve B. Sharkey
Christopher Wieczorek

MINTZ, LEVIN, COHN, FERRIS, GLOVSKY AND
POPEO, PC
701 Pennsylvania Ave., NW
Suite 900
Washington, DC 20004
(202) 434-7300

T-MOBILE USA, INC.
601 Pennsylvania Avenue, N.W.
Washington, DC 20004
(202) 654-5900

Counsel for T-Mobile USA, Inc.

**Admitted in CA only. Practicing under the supervision and guidance of Members of the DC office.*

December 10, 2012

Certificate of Service

I, Megan Capasso, do hereby certify that on this 10th day of December, 2012, I caused a copy of the foregoing comments of T-Mobile USA, Inc., to be served on the following via First class U.S. Mail, postage prepaid on the following:

Jeffrey J. Carlisle
LightSquared Subsidiary, LLC
10802 Parkridge Boulevard
Reston, VA 20191

/s/ Megan Capasso
Megan Capasso